

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Solid phase extraction process for extracting an analyte from a sample comprising one or more of the following steps:
 - a) conditioning a sorbent in a cartridge by passing a liquid suitable for conditioning through the cartridge;
 - b) applying a sample that contains the analyte to the sorbent by passing a liquid which contains the sample through the cartridge;
 - c) washing the sorbent by passing a wash liquid through the cartridge;
 - d) eluting the analyte from the sorbent by passing an elution liquid through the cartridge,

wherein the temperature of the cartridge is raised or lowered at a rate greater than 5°C/min during one or more of the steps a) to d), and

wherein the temperature of the cartridge is raised or lowered at a rate greater than 5°C/min by heating or cooling one or more of the liquids used in step a) to d) before feeding to the cartridge, and

wherein the heating or cooling of the one or more liquids used in steps a) to d) comprises heating with the use of a heating device having a heat capacity sufficient to heat the one or more liquids used in steps a) to d) from 20°C to 100°C with a flow rate of 1 mL/min of liquid in 10 seconds or less.

2. (Canceled)

3. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered in step a), by heating or cooling the liquid for conditioning of the sorbent.

4. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered in step b), by heating or cooling the liquid which contains the sample.

5. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered in step c), by heating or cooling the wash liquid.

6. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered in step d), by heating or cooling the elution liquid.

7. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the process further comprises the step of drying the cartridge, before or after one or more of the steps a) to d), drying being carried out by passing a suitable gas through the cartridge, wherein the gas is heated prior to feeding to the cartridge.

8. (Withdrawn) Solid phase extraction instrument comprising:

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder for holding a cartridge incorporated in the line system;
- a sample feed device connected to the line system;
- a solvent feed device connected to the line system,

wherein the sample feed device and the solvent feed device are connected by the line system to the cartridge holder such that a liquid can be transported from the sample feed device or the solvent feed device to the cartridge holder and can pass through the cartridge,

wherein

the line system is provided with heating and/or cooling means such that the liquid issuing from the sample feed device or the solvent feed device flows successively through the heating and/or cooling means and the at least one cartridge holder.

9. (Withdrawn) Solid phase extraction instrument according to Claim 8, comprising a control system, wherein the control system is equipped to be able to control the heating and/or cooling means.

10. (Withdrawn) Solid phase extraction instrument according to Claim 8, wherein the line system is provided with a gas connection and valve means in order to connect the gas connection to the heating and/or cooling means and the at least one cartridge holder in such a way that gas issuing from the gas connection flows successively through the heating and/or cooling means and the at least one cartridge holder.

11. (Withdrawn) Solid phase extraction instrument, comprising:

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder for holding a cartridge incorporated in the line system;
- a sample feed device connected to the line system;
- a solvent feed device connected to the line system; and
- a control system,

wherein the sample feed device and the solvent feed device are connected by the line system to the cartridge holder such that a liquid can be transported from the sample feed device or the solvent feed device to the cartridge holder and can pass through the cartridge,

wherein

the cartridge exchanging system comprises:

- at least one cartridge magazine having a multiplicity of cartridge locations or at least one cartridge magazine holder in which at least one cartridge magazine having a multiplicity of cartridge locations can be accommodated; and

- a transport system for moving cartridges; and in that the control system is equipped to:

- determine one of the multiplicity of cartridge locations depending on a command given to the control system via input means; and
- control the transport system to move a cartridge between a cartridge location and a cartridge holder, or vice versa.

12. (Withdrawn) Solid phase extraction instrument according to Claim 11, wherein the cartridge exchanging system comprises two of said cartridge holders incorporated in the line system and that the control system is equipped to control the transport system to move a cartridge between the two cartridge holders.

13. (Withdrawn) Solid phase extraction instrument according to Claim 11, wherein the transport system comprises a guide bridge with one or more cartridge grippers mounted thereon and movable along said guide bridge, in that the guide bridge is mounted above the at least one cartridge magazine, or the at least one cartridge magazine holder, and in that the guide bridge and the at least one cartridge magazine, or the at least one cartridge magazine holder, are movable relative to one another in a direction essentially transverse to the longitudinal direction of the guide bridge, and in that the control system is equipped to control this mutual movement.

14. (Withdrawn) Solid phase extraction instrument according to Claim 12, wherein the transport system comprises two cartridge grippers for picking up, moving and setting down cartridges, which cartridge grippers can be controlled essentially independently of one another by the control system.

15. (Withdrawn) Solid phase extraction instrument according to Claim 14, wherein the control system is equipped to move the at least one cartridge magazine, or the at least one cartridge magazine holder.

16. (Withdrawn) Solid phase extraction instrument according to Claim 13, wherein this comprises at least two cartridge magazines, or cartridge magazine holders, which are positioned alongside one another viewed in the longitudinal direction of the guide bridge and in that said cartridge magazines, or cartridge magazine holders, are movable relative to one another in the transverse direction of the guide bridge, and in that the control system is equipped to move said cartridge magazines, or cartridge magazine holders, relative to one another.

17. (Withdrawn) Solid phase extraction instrument according to Claim 11, wherein the input means are equipped for entering an operator's choice for a specific solid phase extraction process and in that the control system is equipped to select the type of cartridge belonging to that specific solid phase extraction process; and/or in that the input means are equipped to enter an operator's choice for a specific type of cartridge, the control system being equipped to determine the specific cartridge location which contains an unused cartridge of that selected or specified type of cartridge.

18. (Withdrawn) Solid phase extraction instrument according to Claim 11, wherein the at least one line system comprises at least one single or multi-way valve which is functionally connected to the control system for operation, and comprises at least two cartridge holders, wherein the control system is equipped to:

- a) switch two cartridge holders in series; and/or
- b) to switch the one cartridge holder in liquid communication with a solvent feed device located upstream thereof and to be able to switch the other cartridge holder in

simultaneous liquid communication with a sample feed device located upstream thereof; and/or

to switch the one and the other cartridge holder each in mutual simultaneous liquid communication with a solvent feed device or a sample feed device.

19. (Withdrawn) Solid phase extraction instrument according to Claim 11, wherein at least one cartridge magazine and/or the cartridges are provided with code means for the type of cartridge in each cartridge location or for the type of cartridge, and in that the solid phase extraction instrument is provided with reading means for reading the code means and for transmitting the code(s) read to the control system.

20. (Withdrawn) Solid phase extraction instrument according to Claim 19, wherein the control system is equipped to control the reading means to read the code means in order to store the type of cartridge associated with each cartridge location in a cartridge memory.

21. (Withdrawn) Solid phase extraction instrument according to Claim 20, wherein the control system is equipped to assign a used or unused status to each cartridge location in the cartridge memory.

22. (Withdrawn) Solid phase extraction instrument comprising

- at least one line system for transporting a liquid;
- a cartridge exchanging system having at least one cartridge holder for holding a cartridge incorporated in the line system;
- a sample feed device connected to the line system;
- a solvent feed device connected to the line system; and
- a control system,

wherein the sample feed device and the solvent feed device are connected by the line system to the cartridge holder such that a liquid can be transported from the sample feed device or the solvent feed device to the cartridge holder and can pass through the cartridge,
wherein

the solvent feed device comprises an injection pump consisting of a piston housing, in which piston is accommodated, which piston can be controlled by means of the control system for movement and

in that the control system is equipped to control the suction stroke speed and/or the suction stroke length of the injection pump so as to draw in solvent at a specific speed or in a specific quantity.

23. (Withdrawn) Solid phase extraction instrument according to Claim 22,
wherein the injection pump has been designed with a capacity such that it is able to take up the total quantity of solvent required for a solid phase extraction step in order to be able to force this through the line system with an uninterrupted delivery stroke.

24. (Withdrawn) Solid phase extraction instrument according to Claim 23,
wherein the control system is equipped first to control the injection pump to take up the total quantity of solvent required for a solid phase extraction step and then to control the injection pump to force this total required quantity through the line system with an uninterrupted delivery stroke.

25. (Withdrawn) Solid phase extraction instrument according to Claim 22,
wherein the control system is equipped to be able to control the injection pump for a delivery stroke with an essentially constant speed or delivery pressure.

26. (Withdrawn) Solid phase extraction instrument according to Claim 22,
wherein a pressure sensor for measuring the pressure in the injection pump is provided in or

by the injection pump, which pressure sensor is actively connected to the control system in order to transmit a pressure signal to the latter.

27. (Withdrawn) Solid phase extraction instrument according to Claim 22, wherein the solvent feed device comprises a first multi-way valve to which, on the one side, the injection pump is connected by means of the suction channel and which, on the other side, is provided with a number of solvent connections to which solvent reservoirs can be connected or have been connected, and in that the control system is equipped to switch the multi-way valve during suction by the injection pump in such a way that a mixture is drawn in which is collected in the injection pump and/or to switch the multi-way valve prior to suction by the injection pump.

28. (Withdrawn) Solid phase extraction instrument according to Claim 27, wherein the suction channel of the injection pump connected to one side of the multi-way valve is also a pressure channel and in that the multi-way valve is further connected on the other side to the line system.

29. (Withdrawn) Solid phase extraction instrument according to Claim 27 wherein the solvent feed device comprises at least a further multi-way valve to which, on the one side, one of the solvent connections of the first multi-way valve is connected and which, on the other side, is provided with further solvent connections.

30. (Withdrawn) Solid phase extraction instrument according to Claim 22, wherein the control system comprises input means for entering an operator's choice for

- a specific solid phase extraction process; and/or
- a specific solvent or combination of solvents; and/or
- a specific delivery pressure; and/or
- a specific suction speed; and/or

- a specific solvent volume; and/or
- a specific ration of solvent volumes.

31. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered at a rate greater than 50°C/min during one or more of the steps a) to d).

32. (Previously Presented) Solid phase extraction process according to Claim 1, wherein the temperature of the cartridge is raised or lowered at a rate greater than 50°C/min by heating or cooling one or more of the liquids used in step a) to d) before feeding to the cartridge.

33. (Canceled)

34. (Currently Amended) Solid phase extraction process according to Claim 32 Claim 1, wherein the heating or cooling of the one or more liquids used in steps a) to d) comprises heating with the use of a heating device having a heat capacity sufficient to heat the one or more liquids used in steps a) to d) from 20°C to 100°C with a flow rate of 1 mL/min of liquid in 5 seconds or less.

35. (Currently Amended) Solid phase extraction process according to Claim 32 Claim 1, wherein the solid phase extraction process comprises an injection pump with a capacity that allows for the injection pump to take the entire amount of liquid required for one of steps a) - d) and inject the liquid into a line system with an uninterrupted delivery stroke.